

# UNITED STATES PATENT AND TRADEMARK OFFICE



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. BOX 1450 Alexandria, Viginia 22313-1450

## NOTICE OF ALLOWANCE AND FEE(S) DUE

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20792

7590

06/27/2003

MYERS BIGEL SIBLEY & SAJOVEC PO BOX 37428 RALEIGH, NC 27627 EXAMINER

BARR, MICHAEL E

ART UNIT

CLASS-SUBCLASS

1762

427-377000

DATE MAILED: 06/27/2003

	APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
•	10/045.542	10/26/2001	Mrinal Kanti Das	5308-157IP2	3570

TITLE OF INVENTION: METHOD OF FABRICATING AN OXIDE LAYER ON A SILICON CARBIDE LAYER UTILIZING AN ANNEAL IN A HYDROGEN ENVIRONMENT

APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1300	\$300	\$1600	09/29/2003

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. <u>PROSECUTION ON THE MERITS IS CLOSED</u>, THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

- A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.
- B. If the status is changed, pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above and notify the United States Patent and Trademark Office of the change in status, or

If the SMALL ENTITY is shown as NO:

- A. Pay TOTAL FEE(S) DUE shown above, or
- B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check the box below and enclose the PUBLICATION FEE and 1/2 the ISSUE FEE shown above.
- ☐ Applicant claims SMALL ENTITY status. See 37 CFR 1.27.

II. PART B - FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B - Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Box ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.



#### PART B - FEE(S) TRANSMITTAL



Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Commissioner for Patents Alexandria, Virginia 22313-1450

(703)746-4000 Fax

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 4 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Legibly mark-up with any corrections or use Block I)

20792

7590

06/27/2003

MYERS BIGEL SIBLEY & SAJOVEC PO BOX 37428 RALEIGH, NC 27627

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Box Issue Fee address above, or being facsimile transmitted to the USPTO, on the date indicated below.

(Depositor's name)	
(Signature)	
(Date)	

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10/045,542	10/26/2001	Mrinal Kanti Das	5308-157IP2	3570	•

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nonprovisional	NO	\$1300	\$300	\$1600	09/29/2003
EXAMI	NER	ART UNIT	CLASS-SUBCLASS		-
BARR, MIC	CHAEL E	1762	427-377000		
1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).			2. For printing on the patent from the names of up to 3 registered	patent attorneys	-
☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.			or agents OR, alternatively, (2) single firm (having as a mem	ber a registered	
☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.			attorney or agent) and the nar registered patent attorneys or ag- is listed, no name will be printed.	ents. If no name	

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. Inclusion of assignee data is only appropriate when an assignment has been previously submitted to the USPTO or is being submitted under separate cover. Completion of this form is NOT a substitute for filing an assignment. (A) NAME OF ASSIGNEE

(B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category	or categories (will not be printed on the patent)	🔾 individual	☐ corporation or other private group	entity		
4a. The following fee(s) are enclosed:	4b. Payment of Fee(s)	•				
☐ Issue Fee	☐ A check in the amo	ınt of the fee(s) is er	nclosed.			
☐ Publication Fee	☐ Payment by credit of	☐ Payment by credit card. Form PTO-2038 is attached.				
☐ Advance Order - # of Copies ☐ The Commissions		er is hereby authorized by charge the required fee(s), or credit any overpayment, to mber (enclose an extra copy of this form).				
Commissioner for Patents is requested to apply	the Issue Fee and Publication Fee (if any) or to	re-apply any previo	ously paid issue fee to the application id	lentified above.		
(Authorized Signature)	(Date)					
NOTE; The Issue Fee and Publication Fee (other than the applicant; a registered attorne interest as shown by the records of the United	y or agent; or the assignee or other party in	ē				
This collection of information is required by obtain or retain a benefit by the public which application. Confidentiality is governed by 35	n is to file (and by the USPTO to process) as	1				

application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Alexandria, Virginia 22313-1450.

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10/045,542	10/26/2001	Mrinal Kanti Das	5308-157IP2	3570
20792	7590 06/27/2003		EXAMIN	ER
MYERS BIGEL SIBLEY & SAJOVEC			BARR, MICHAEL E	
PO BOX 37428 RALEIGH, NC			ART UNIT	PAPER NUMBER
			1762	
			DATE MAILED: 06/27/2003	

# Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The patent term adjustment to date is 0 days. If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the term adjustment will be 0 days.

If a continued prosecution application (CPA) was filed in the above-identified application, the filing date that determines patent term adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) system. (http://pair.uspto.gov)

Any questions regarding the patent term extension or adjustment determination should be directed to the Office of Patent Legal Administration at (703)305-1383.



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10/045,542	10/26/200	01	Mrinal Kanti Das	5308-157IP2	3570
20792 7590 06/27/2003		6/27/2003		EXAMINER	
MYERS BIGEL SIBLEY & SAJOVEC			BARR, MICI	BARR, MICHAEL E	
PO BOX 37428 RALEIGH, NC	27627			ART UNIT	PAPER NUMBER
UNITED STAT	ΓES			1762	
				DATE MAILED: 06/27/2003	

## Notice of Fee Increase on January 1, 2003

If a reply to a "Notice of Allowance and Fee(s) Due" is filed in the Office on or after January 1, 2003, then the amount due will be higher than that set forth in the "Notice of Allowance and Fee(s) Due" since there will be an increase in fees effective on January 1, 2003. See Revision of Patent and Trademark Fees for Fiscal Year 2003; Final Rule, 67 Fed. Reg. 70847, 70849 (November 27, 2002).

The current fee schedule is accessible from: http://www.uspto.gov/main/howtofees.htm.

If the issue fee paid is the amount shown on the "Notice of Allowance and Fee(s) Due," but not the correct amount in view of the fee increase, a "Notice to Pay Balance of Issue Fee" will be mailed to applicant. In order to avoid processing delays associated with mailing of a "Notice to Pay Balance of Issue Fee," if the response to the Notice of Allowance and Fee(s) due form is to be filed on or after January 1, 2003 (or mailed with a certificate of mailing on or after January 1, 2003), the issue fee paid should be the fee that is required at the time the fee is paid. If the issue fee was previously paid, and the response to the "Notice of Allowance and Fee(s) Due" includes a request to apply a previously-paid issue fee to the issue fee now due, then the difference between the issue fee amount at the time the response is filed and the previously paid issue fee should be paid. See Manual of Patent Examining Procedure, Section 1308.01 (Eighth Edition, August 2001).

Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.

	Application No.	Applicant(s)
·	10/045,542	DAS ET AL.
Notice of Allowability	Examiner	Art Unit
	Michael Barr	1762
The MAILING DATE of this communication apperature All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RI of the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED in this ap or other appropriate communicatio GHTS. This application is subject	oplication. If not included n will be mailed in due course. <b>THIS</b>
<ol> <li>This communication is responsive to the amendment and to the allowed claim(s) is/are 1-20.</li> <li>The allowed claim(s) is/are 1-20.</li> <li>The drawings filed on 26 October 2001 are accepted by the 4. Acknowledgment is made of a claim for foreign priority und a) All b) Some* c) None of the:         <ol> <li>Certified copies of the priority documents have 2. Certified copies of the priority documents have 3. Copies of the certified copies of the priority documents</li> </ol> </li> </ol>	e Examiner.  ler 35 U.S.C. § 119(a)-(d) or (f).  been received.  been received in Application No	
International Bureau (PCT Rule 17.2(a)).  * Certified copies not received:  5. Acknowledgment is made of a claim for domestic priority up (a) The translation of the foreign language provisional a 6. Acknowledgment is made of a claim for domestic priority up Applicant has THREE MONTHS FROM THE "MAILING DATE" of below. Failure to time the complex will recent to a PANDONIATION of	pplication has been received.  nder 35 U.S.C. §§ 120 and/or 121.  this communication to file a reply of	complying with the requirements noted
below. Failure to timely comply will result in ABANDONMENT of 7.   A SUBSTITUTE OATH OR DECLARATION must be subm INFORMAL PATENT APPLICATION (PTO-152) which gives reas	nitted. Note the attached EXAMINE	R'S AMENDMENT or NOTICE OF
<ul> <li>8.  CORRECTED DRAWINGS must be submitted.</li> <li>(a)  including changes required by the Notice of Draftspers</li> <li>1) hereto or 2) to Paper No.</li> <li>(b) including changes required by the proposed drawing of including changes required by the attached Examiner</li> </ul>	correction filed, which has t	peen approved by the Examiner.
Identifying indicia such as the application number (see 37 CFR 1. each sheet.	84(c)) should be written on the draw	ings in the front (not the back) of
9. DEPOSIT OF and/or INFORMATION about the deposit attached Examiner's comment regarding REQUIREMENT FOR T		
Attachment(s)		
<ul> <li>1 Notice of References Cited (PTO-892)</li> <li>3 Notice of Draftperson's Patent Drawing Review (PTO-948)</li> <li>5 Information Disclosure Statements (PTO-1449), Paper No. 6.</li> <li>7 Examiner's Comment Regarding Requirement for Deposit of Biological Material</li> </ul>	4⊡ Interview Sumn 6⊡ Examiner's Am	nal Patent Application (PTO-152) hary (PTO-413), Paper No endment/Comment tement of Reasons for Allowance

Application/Control Number: 10/045,542 Page 2

Art Unit: 1762

#### **ALLOWANCE**

1. Claims 1-20 are allowed.

2. The following is an examiner's statement of reasons for allowance: The applicant's arguments filed 2/25/2003 were convincing to the examiner. There is no clear suggestion in the prior art to fabricate a nitrided oxide layer on a silicon carbide substrate and then anneal in a hydrogen containing environment. The prior art fails to provide suggestion to nitride the oxide layer and then anneal in the hydrogen containing environment.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Application/Control Number: 10/045,542

Art Unit: 1762

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Barr whose telephone number is 703-305-7919. The examiner can normally be reached on Monday-Thursday 6:00 am-4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shrive Beck can be reached on 703-308-2333. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 or 703-305-5408 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

Michael Barr Primary Examiner Art Unit 1762 Page 3

MB

June 24, 2003